



Rail Enhancement Fund
Project Application Form

Internal Use

DRPT Tracking #

Date: *January 31, 2008*

A. Name of Applicant (Name and Address)

Norfolk Southern Railway Company
Three Commercial Place
Norfolk, VA 23510

Applicant type:

- ☐ Passenger Railroad
☒ Freight Railroad
☐ Locality
☐ Business
☐ Other _____

B. Contact Information:

Responsible Person/Title: Sarah Quisenberry, Director Strategic Planning

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Project Manager/Title: Sarah Quisenberry, Director Strategic Planning

Telephone: 757-629-2686 Fax: 757-533-4884 Email: sarah.quisenberry@nscorp.com

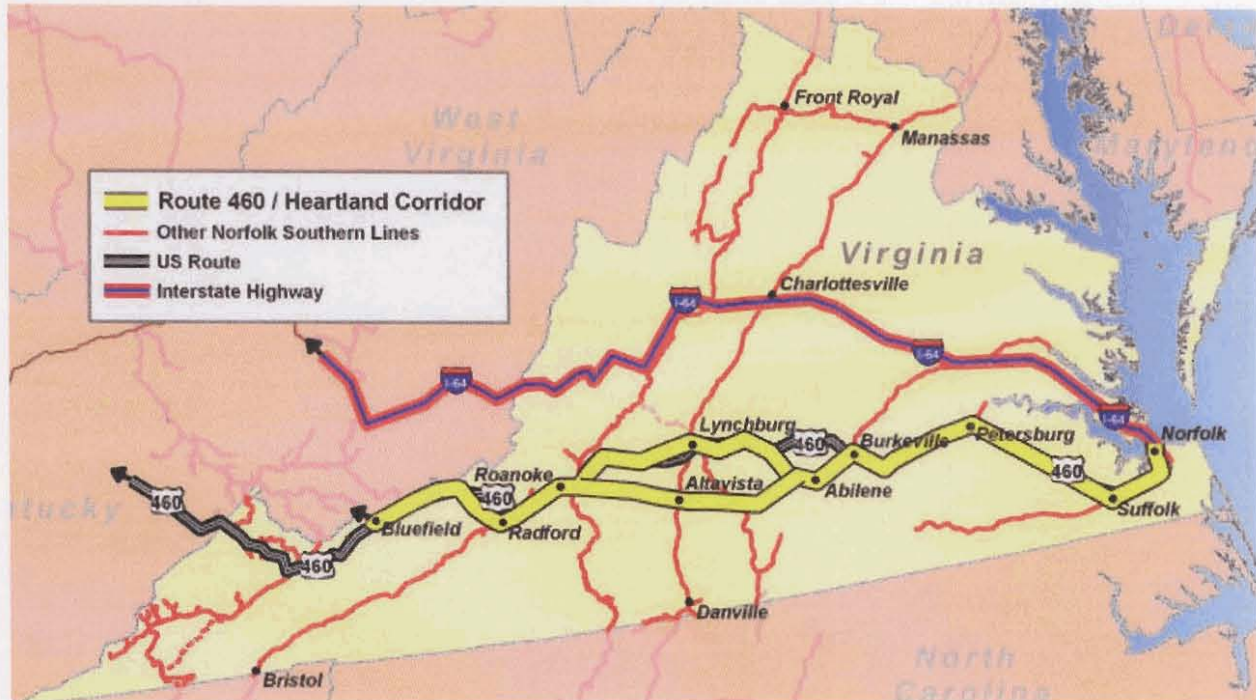
C. Project Title: Route 460/Heartland Corridor Initiatives

D. Project Location: (City/County, Rail line, Railroad Mile Post, attach map)

The Route 460/Heartland Corridor is comprised of the NS mainlines from the Port of Hampton Roads across the southern half of the state through Roanoke to Bluefield. The route roughly parallels the highway Route 460. (see map next page)

Projects:

- A) Kilby Crossovers - Suffolk, VA, mp N-22 – N-25, see map Exhibit I
- B) Pamplin Siding – Appomattox County, mp N-169, see map Exhibit II
- C) Altavista Line Tunnel Clearances – see map Exhibit III
 - Mansion, Campbell County, mp V-194.4
 - Leesville, Campbell County, mp V-206.3
 - Huddleston, Bedford County, mp V-213.4
 - Goodview, Bedford County, mp V-225.8
 - Hardy, Bedford County, mp V-235.7
 - 8 clearance issues, mp V-236 through V-206, Campbell & Bedford Counties
- D) Montgomery Tunnel Clearance – Montgomery County, mp N-284.6, Exhibit IV
- E) South Central Virginia Intermodal Terminal (SCVIT) - New Bohemia, VA, off Lamore Drive, Prince George County, mp N-74, for map, see map Exhibit V



E. Owner of Property/Right-of-Way/Facility/Personal Property:

Norfolk Southern Railway Company owns the mainline track rights-of-way, tunnels, bridges, and related appurtenances. NS or an affiliate will acquire any property required.

F. Responsible Party for Continuous Maintenance of Project:

Norfolk Southern Railway Company. This application is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

G. Project Information:

1) Description of Project:

The Route 460/Heartland Corridor is comprised of the NS mainlines from the Port of Hampton Roads across the southern half of the state through Petersburg and Roanoke and on to Bluefield, roughly paralleling Route 460. Coal, intermodal and merchandise trains use the Route 460 Corridor. While coal trains use this route and their use will be noted in the application, specific infrastructure requirements directly related to Coal traffic will not be addressed in this application but in a separate Coal corridor application. Specific freight infrastructure requirements that would also benefit proposed passenger service will be noted in this application; a separate Passenger Corridors application will be submitted for identifying projects specific for passenger service.

The NS 2008 capital budget includes investments both to maintain the safety and quality of the existing NS franchise, and to support the business growth expected in future years. In 2008, NS plans to spend \$1.425 billion on capital investments. This represents an increase of \$84 million, or 6%, versus 2007 expenditures. Each year, a significant portion of capital expenditures is invested to maintain the NS franchise, including maintaining right-of-way, equipment replacement, and safety and regulatory requirements. Approximately 71% of 2008 capital expenditures will be spent on maintaining the NS railroad for continued safe and reliable operations. The remaining 29% of the budget is related to the growth and productivity of the franchise. These projects include infrastructure and terminal expansion investments, strategic opportunities, and projects that improve productivity and efficiency.

Public private partnerships enable NS to spread investment dollars so that more projects can be completed; the public pays for societal benefits and NS pays for operational benefits. Overall, Norfolk Southern authorized \$120 million for strategic capacity improvements on NS lines in 2006 and 2007 – not including the Heartland and Crescent Corridors. The Heartland Central Corridor project (Rail Enhancement grant 76506-1) enables NS to create a more efficient intermodal service lane for the Port of Hampton Roads. This project would not have been done if not for the \$150 million public/private partnership involving contributions totaling \$95 million from the federal government, Virginia, West Virginia, and Ohio. The projects identified in this application also would not be done without funding assistance. NS will invest to maintain the NS right-of-way through Virginia; however, apart from Heartland (Rail Enhancement grant 76506-1) and Crescent (Rail Enhancement grant 76508-4), over the next three years infrastructure investment solely funded by NS is expected to be concentrated in two major areas -- the lines east of Chicago and the Southeast (Atlanta and Birmingham). Rail Enhancement funds will enable NS to also address several bottlenecks in the Commonwealth of Virginia.

Strong freight railroads with adequate capacity enable companies in the Commonwealth of Virginia to conduct business efficiently and effectively. A strong transportation network is vital to a state's economic health and future vitality. In 2007, 693,810 cars originated or terminated in Virginia on Norfolk Southern rail lines. In the same year, 142,426 cars originated AND terminated on Norfolk Southern rail lines in Virginia.

The following overview will discuss the Route 460/Heartland corridor starting in the east at the ports of Hampton Roads and traveling through the Commonwealth to the western border at Bluefield; specific bottlenecks which impact the line will be identified. These bottleneck locations and issues will identify specific infrastructure projects proposed for Rail Enhancement funding; a summary of each specific infrastructure project will follow the Route 460/Heartland Corridor overview.

The rail line from Tidewater to Crewe is double track with directional running (trains usually run east on one track and west on the other). Traffic moving over this segment of the corridor includes the loaded unit trains of export coal traveling east to the port and

unit trains of empty coal cars traveling back west to the mines for reloading. This double track mainline is the access for intermodal traffic traveling to and from the tidewater ports, such as NIT and Maersk. The Heartland Corridor traffic (REF grant agreement 76506-1) will operate over this line. Merchandise trains also use this mainline and several customers are located along the line.

At the eastern end of the Route 460/Heartland Corridor sits Suffolk (mp N-22) where NS and CSX lines cross, Commonwealth Railway and NS interchange cars, and the FD branch line to Lawrenceville, VA joins the NS system. This gateway to the Virginia ports is located downtown in a growing town with seven at-grade crossings within a 2-mile stretch of rail line. These grade crossings will become blocked if service disruptions of any kind result in missed interchanges or if yards (either NS or Commonwealth Railway) become choked with undeliverable cars due to line capacity constraints. Traffic to and from Maersk and NIT must progress through this area. Loaded coal trains travel east through the town on their way to Lambert's Point for export and empty trains return west on this route. Unit stone trains from the Vulcan quarry on the FD line travel this line on their way east to be delivered to Vulcan in Norfolk or interchanged with the Bay Coast Railroad and Chesapeake and Albemarle Railroad. Traffic growth is projected at NIT and Maersk, as well as a new terminal to be built at Craney Island. Export coal volumes have rebounded with changes in the world market. The Hampton Roads cities continue to grow which provides additional consumers to purchase goods brought into the area but also increases vehicular traffic on the area's roadways. NS proposes a reconfiguration of track through Suffolk to provide greater train routing flexibility in order to minimize the time that grade crossings are blocked for vehicular traffic (See Kilby Crossovers project).

Moving west from Suffolk along the double track, directional running main line brings one to Petersburg, VA. NS and CSX interchange traffic at Petersburg (2007 19,972 cars). NS operates an auto ramp and transload facility at Petersburg. NS proposes to build a new intermodal terminal near Petersburg, VA (see South Central Virginia Intermodal Terminal Project). West of Petersburg at Burkeville, VA, the NS line to Richmond and West Point, VA joins the NS system. NS interchanges traffic with the shortline NCVA's Virginia Southern Railroad at Burkeville, VA.

Approximately 22 miles west of Burkeville, at Abilene, the NS mainline diverges into two routes. Merchandise, intermodal and empty unit trains returning west (coal and grain) use the northern route, from Abilene to Lynchburg. This route is single track requiring trains to pass each other at sidings. Each time two trains pass, one has to wait – sometimes for more than an hour – for the second one to arrive at the passing point. Heartland Corridor intermodal trains (average 9,000 feet) will use this route once the tunnel clearance projects are completed. NS proposes to add a siding at Pamplin to provide more opportunities for trains to meet and pass (see Pamplin siding project).

West of Pamplin, Lynchburg is located at the junction of Highways 29 and 460 in west-central Virginia in the James River Valley. At Lynchburg the east-west Route 460/Heartland Corridor intersects with the north-south NS mainline (I-81/Crescent

Corridor). At Lynchburg some trains that have been traveling the NS system east or west and need to go north or south will change onto the other NS mainline. The east-west line is the former N&W line and the north-south line is the former Southern line. Movements between these lines are complicated due to topographical and grade issues. Frequent interchange activity takes place in all directions. The Amtrak New York-Atlanta-New Orleans Crescent train operates 2 trains per day with a stop in Lynchburg. Currently NS, Amtrak and DRPT are discussing the possibility of a new Amtrak service from Washington DC to Lynchburg, which will require capacity improvements to ensure uninterrupted freight flows and the ability for the Amtrak train set to turn and overnight at Lynchburg. These projects will be discussed in a separate passenger corridor application. Beyond Lynchburg, the route is single track with passing sidings into Roanoke. The possibility exists to extend the proposed new Amtrak service from Washington DC to Lynchburg onto Roanoke if its initial startup to Lynchburg is successful. Extension of passenger service to Roanoke will require capacity improvements to ensure uninterrupted freight flows. From Lynchburg to Roanoke the Route 460/Heartland Corridor and I-81/Crescent Corridor overlap. Both Heartland and Crescent intermodal traffic will operate on this line, in addition to the merchandise and empty unit trains operating on the line.

Going back to Abilene, approximately 22 miles west of Burkeville, the NS mainline diverged into two routes. The southern route is used for eastbound unit coal trains. This line is single track with few sidings. At Altavista the east-west NS mainline intersects with the north-south NS mainline (I-81/Crescent Corridor). 4 merchandise trains per day, moving between Roanoke and Linwood, NC, turn at Altavista from the east-west line to the north-south line and vice versa. All high and wide clearances and intermodal double stack trains must use the northern route between Burkeville and Roanoke, as five tunnels and 8 other obstructions (e.g. bridges) limit the height of cars moving on the Altavista line. NS proposes to improve the tunnel and other clearances on the Altavista line in order to ensure adequate capacity for the Heartland Corridor intermodal trains, Crescent Corridor intermodal trains and export coal trains by adding flexibility to train routing options (see Altavista Tunnel Clearance Project). Having the clearances to allow high and wide movements and double stack cars to use either the northern or southern route to/from Roanoke would increase capacity on the northern route which could help to create capacity for possible new passenger service.

At Roanoke the two NS mainlines come together and run west side by side. At Salem, the lines cross and the former northern route carrying intermodal (the Heartland Corridor intermodal route to Columbus, Ohio) and merchandise traffic becomes the southern route. This route is primarily double track. The former southern route carrying eastbound export coal becomes the northern route at Salem (primarily single track). West of Roanoke, the Route 460/Heartland Corridor route and the I-81/Crescent Corridor route diverge at Radford, VA with the Crescent Corridor traffic operating to and from Bristol, Knoxville and points west. Beyond this point the Route 460/Heartland Corridor is double track to the west.

Route 460/Heartland Corridor Projects	Start Year	Benefits	Cost (millions)
Kilby Crossovers	2009	Capacity, flexibility, grade crossings	\$3.5
Pamplin Siding	2010	Capacity, flexibility	\$6.0
Altavista Tunnel Clearances	2011	Capacity, flexibility, shorter route	\$22.895
Montgomery Tunnel Clearance	2011	Capacity, flexibility	\$9.6
South Central Virginia Intermodal Terminal	2014	Economic development, Truck to rail diversion	\$18.0

A. Project Kilby Crossovers

Suffolk is comprised of two main tracks (each uni-directional) on the "N" line of the NS system. Both the Commonwealth Railway (CWRV) and the FD branch line to Lawrenceville, VA join the NS system at Suffolk. There are seven at-grade crossings within a 2-mile stretch of rail line in downtown Suffolk. Trains presently operate through Suffolk at 40 MPH. As traffic into and out of the greater Hampton Roads area increases, the risk of congestion along the NS system increases which can result in Suffolk residents facing more and longer waits at grade crossings.

NS has designed Maersk service with CWRV to stop the NS train outside of Suffolk to be sure that the NS train can operate through Suffolk and onto the CWRV's marshalling yard without stopping and blocking Suffolk grade crossings for a prolonged period of time. However, NIT, merchandise, coal and other intermodal traffic also must move through the bottleneck of Suffolk which creates an increased risk of congestion. In addition to one round-trip (5 days per week) CWRV interchange (non-intermodal) movement and numerous Suffolk switcher movements between MP N-22.4 and MP N-24.5, the following is a summary of movements through Suffolk (two week sample):

- a) Average total movements per 24-hour day = 22.5
- b) Average total eastbound movements = 11.6
- c) Average eastbound movements between Midnight and 6AM = 2.9
- d) Average eastbound movements between 6AM and Noon = 2.5
- e) Average eastbound movements between Noon and 6PM = 2.9
- f) Average eastbound movements between 6PM and Midnight = 3.3

When the new marine capacity in Hampton Roads is filled, NS expects daily intermodal trains to grow from 3 trains to 5 in each direction at least six days per week. There are 2 trains per day in each direction to the FD branch line (Vulcan stone, Lawrenceville brick, Franklin paper and other customers) included in the 22 trains listed above. There are 2 coal trains per day in each direction in this count, which has recently increased to 6 with the return of the export coal market.

Rail Enhancement grant 76507-6 provided \$1.48 million in funds to add a powered connection from Main 1 (eastbound main) to Main 2 (westbound main) and power the

connection from Main 2 to CWRY in order to speed the movement of trains between NS and CWRY and improve efficiency and service. It is expected that with the addition of a Craney Island terminal, as well as growth at all the Tidewater ports, improvements will be required to assist traffic in moving safely and smoothly through the Suffolk area.

NS eastbound Maersk trains will be held in Suffolk 0.8 mile west of "FD" line junction switch (1.5 mile away from CWRY) until CWRY can take same to avoid blocking crossings. As part of Virginia Rail Enhancement Grant 76507-6 one No. 15 cross-over was installed at N-22 to assist in handling Maersk traffic. It is recommended that a #20 "universal" crossover is installed at milepost N-22.7 and N-25.5, with bi-directional signaling to allow a train of 9,500 feet in length to clear (without blocking any crossings) while it is "run-around" by other eastbound trains.

The project would include the following:

1. Remove No. 10 Hand Throw Cross-Over at MP N-22.35
2. Install a Power No. 20 Cross-Over at MP N-22.39
3. Install a Power No. 20 Cross-Over at MP N-22.69.
4. Remove No. 10 Hand Throw Cross-Over at MP N-23.12.
5. Remove No. 10 Hand Throw Cross-Over at MP N-23.38.
6. Install a Double Power No. 20 Cross-Over west of Suffolk around MP N-25.4.
7. Remove No. 10 Hand Throw Cross-Over at MP N-25.49.

The estimated cost of the project is \$3.5 million. The benefits include increased routing flexibility and the ability to move trains, both inbound to and outbound from Hampton Roads, in either direction (east or west) on either line (versus the current uni-directional running with one line westbound and one line eastbound) in order to move through Suffolk in an expeditious manner and minimize the time that grade crossings would be blocked.

B. Project Pamplin Siding

On the single line northern route between Burkeville and Roanoke, there is a siding at Abilene, where the NS line diverges into the northern and southern route, and the next siding is at Appomattox 26 miles away. Pamplin is located approximately 36 miles west of Burkeville and roughly half-way between the Abilene and Appomattox sidings. Pamplin is a small town which has rehabilitated the old depot to house the town's library and community center. If a safe byway can be accomplished, Pamplin plans to use the depot as a trail head for the Farmville trail that will be built along the abandoned NS right-of-way through Farmville. When NS abandoned the Farmville line, approximately one mile of the main line rail and part of an old siding were left in the ground to railbank for future use for a siding when traffic levels warranted additional capacity on the Heartland Corridor. Traffic growth projections for the port of Hampton Roads, between NIT and Craney Island intermodal and the recent rebound in coal traffic, predict that the extra capacity and operational flexibility associated with a new 11,000 foot siding at Pamplin will be needed by 2010.

NS would use the rail left in the ground at Pamplin in order to reduce costs associated with the siding. An 11,000 foot siding at Pamplin would enable long intermodal trains to meet and pass. The siding will increase the capacity of the line enabling intermodal trains and empty unit trains to meet and pass.

The estimated cost of the project is \$6 million. The benefits include increased routing flexibility and capacity. Longer sidings are important as Heartland Corridor intermodal traffic increases, a train will have cars added to it making it longer until there is enough volume and stability in the traffic to warrant the addition of a new train start. With projections of increased coal shipments, more empty coal unit trains will return via this route. Transportation will need to route high service intermodal trains around the empty unit coal trains.

C. Project Altavista Line Tunnel Clearances

Approximately 22 miles west of Burkeville, at Abilene, the NS mainline diverges into two routes. Merchandise, intermodal and empty unit trains returning west (coal and grain) use the northern route, from Abilene through Lynchburg to Roanoke. Eastbound, loaded unit coal trains to the port of Hampton Roads and merchandise trains moving between Roanoke and Linwood, NC, use the southern route from Abilene through Altavista to Roanoke. The Altavista line is single track with few sidings. All high and wide clearances and intermodal double stack trains must use the northern route between Burkeville and Roanoke, as five tunnels and 8 other obstructions (e.g. bridges) limit the height of cars moving on the Altavista line.

Clearing the tunnels and other clearance obstructions on the southern route would provide two parallel routes that would enable routing optimization. Directional running could be accomplished with the northern route used for eastbound moves and the southern route for westbound moves, or vice versa. Directional running minimizes the need for meets and passes of trains and minimizes the need for long sidings on which to accomplish the meets and passes. Some meets and passes and sidings will still be required in order to serve local customers on the lines. Double stack intermodal service between Roanoke and Greensboro, NC, could be routed over the Altavista line rather than the northern route. Turning south at Altavista rather than Lynchburg would save approximately 27 miles for every train rerouted. In addition it would allow Heartland Corridor intermodal trains to operate on either the northern or southern route. If one route were fouled due to weather, a rock slide or accident, Heartland intermodal trains could be rerouted to the other route so that service was not negatively impacted. Having the clearances to allow high and wide movements and double stack cars to use either the northern or southern route to/from Roanoke would increase capacity on the northern route which could help to create capacity for possible new passenger service between Lynchburg and Roanoke. The estimated cost of this project is \$22.895 million.

D. Project Montgomery Tunnel Clearance

Montgomery Tunnel is located on the N line between Roanoke and Radford. This is a double track line; however, only one main line through the tunnel is cleared. Currently double stack intermodal trains may not be operated on Main 1 through Montgomery

Tunnel. Clearing both mains for the tunnel would allow for optimal flexibility in train routing. Currently trains often must wait for another train to clear before they can proceed through the tunnel. This causes delay and eliminates the ability to directionally run trains on this double track section.

E. Project South Central Virginia Intermodal Terminal (SCVIT)

Today, intermodal service to the Petersburg/Richmond/Emporia Region is provided from Norfolk Southern's large intermodal terminal in Chesapeake, about 75 miles away. All intermodal freight to or from the Region is trucked (drayed) in each direction via I-64, US 460 or US 58. NS proposes to construct a facility to transfer freight containers and trailers between the rail and highway modes of travel in the Richmond/Petersburg market. The facility will have approximately 200 trailer parking spaces, 125 ground spaces for stacking containers, two loading/unloading tracks each about 2000' clear length, one support track about 2000' clear length, small gate/office and maintenance buildings, and an equipment maintenance pad with an oil/water separator. A new South Central Virginia Intermodal Terminal (SCVIT) would be directly served by NS intermodal trains to/from Hampton Roads and the Midwest/West Coast via the Heartland Corridor. The estimated cost of the project is \$18 million.

The SCVIT will enhance economic development opportunities in the Region, especially in new international markets, by providing a regional facility to handle intermodal freight. Current intermodal freight to/from the region will require less draying than at present. With reduced drayage comes less wear and tear, less truck congestion and less pollution on area highways, particularly I-64, US 460 and US 58. The SCVIT will add further capacity to the Commonwealth's intermodal network by freeing up capacity at the existing Chesapeake intermodal facility to handle more port related traffic.

2) Project Objectives:

A – Kilby crossovers

To improve efficiency of train handling and minimize train delay in Suffolk, VA in order to provide faster and more reliable trains services for all Hampton Roads intermodal terminals including NIT, the new APM Terminal and the proposed terminal at Craney Island and to provide flexibility in train routing of loaded unit coal trains through Suffolk to Lamberts Point for export. Reliable intermodal trains service will stimulate rail intermodal traffic growth, promote economic development and international trade in Hampton Roads and attract truck traffic to rail, thereby reducing congestion and air pollution, and enhancing mobility. Increases in export and metallurgical coal over the past year are projected to continue which will result in more coal trains moving through the area than have during the prior five years. Double crossovers at Kilby will speed the movement of trains, reduce the potential to block grade crossings, improve efficiency and service, and minimize delays to NS mainline trains.

B – Pamplin siding

The overall objective of the project is to increase capacity and to speed up train operations by increasing the capacity of a core line for more fluid and flexible

operations. On average there are 23 trains utilizing this route incurring an average of 40 minutes delay per train each day for meets and passes between Appomattox and Abilene.

C – Altavista tunnels

To increase the capacity of the Route 460/Heartland Corridor by eliminating clearance restrictions associated with five tunnels and 8 miscellaneous obstructions. High and wide and double stack intermodal could be routed over the northern or southern route if the southern route is cleared. Operations could be more fluid and flexible by enabling directional running on the two parallel routes thereby minimizing the number of meets and passes that must be arranged and slow down traffic flow. 27 miles per train could be saved by rerouting Roanoke/Greensboro trains to southern route. The ability to route double stack intermodal trains on the southern route would add capacity that could help support the introduction of passenger service between Lynchburg and Roanoke if NS, Amtrak and DRPT successfully negotiate terms for this proposed passenger service.

D- Montgomery Tunnel

The objective of the project is to increase freight capacity by enhancing routing options and flexibility since both rail lines through the Montgomery Tunnel would be cleared.

E. SCVIT

The primary objective of the Project is to provide the Petersburg/Richmond/Emporia region with a rail intermodal option for the movement of freight, while also reducing truck traffic now moving between that region and the closest existing intermodal facilities located in the Norfolk area. A secondary objective is to free up capacity at the existing Norfolk Southern intermodal facility in Chesapeake to allow it to handle more growth in Hampton Roads intermodal traffic. It will provide greater freight capacity without further stress on available highway capacity, particularly with respect to Route 460 and I-64.

3) Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

REF Grant 76507-6, Crewe/ Suffolk Improvements, included one No. 15 cross-over and installation of power on the existing turnout from NS to CWRV at milepost N-22.6. The Crewe/Suffolk grant directly assisted the movement of Maersk traffic from CWRV to NS. The Kilby crossovers will enhance the prior Rail Enhancement grant by ensuring that unit coal trains bound for export at Lamberts Point, NIT traffic, Vulcan rock trains bound for Norfolk and the Eastern Shore of Virginia, and other merchandise traffic move fluidly through this bottleneck and that grade crossings are not blocked for extensive periods of time.

REF Grant 76506-1, Heartland Central Corridor Components, included tunnel clearances on the NS line west of Roanoke. This opens a new and shorter route from the ports of Hampton Roads to the mid-west. The Altavista Line Tunnels project will enhance the prior Rail Enhancement grant by providing flexibility in routing and thereby capacity to handle future traffic growth from the ports of Hampton Roads and from Heartland Corridor and Crescent Corridor traffic initiatives. The ability to route double stack intermodal trains on the southern route would add capacity that could help support the introduction of passenger service between Lynchburg and Roanoke if NS, Amtrak and DRPT successfully negotiate terms for this proposed passenger service.

The SCVIT Project will be a natural beneficiary of the Heartland Corridor project (REF Grant 76506-1) by NS. The Heartland Corridor project will provide double stack clearances so that container traffic between the SCVIT and Chicago and West Coast points can move double-stacked via the most direct rail mainline. Without the Heartland Project and the SCVIT, such traffic will either have to move over the highway, via circuitous rail routes, or in less economical non-double stack train service.

- 4) Describe the Public Benefits of Project. Identify significant types of benefits and beneficiaries from this project. (See Attachment A).

A. Kilby Crossovers

The Kilby crossovers will provide greater train routing and movement flexibility which will result in fewer blocked crossings in downtown Suffolk and reduce the risk of grade crossing collisions.

B. Pamplin Siding

By reducing aggregate delay, this project will help to improve air quality and conserve fuel. By increasing capacity, the project enables the rail mode to absorb more growth.

C. Altavista Line Tunnel Clearances

By removing clearance obstructions on the southern route of the Route 460/Heartland Corridor, this project provides flexibility for train routing and the opportunity to bi-directionally run trains (east on one route and west on the other) which will minimize the number of meets and passes. Reducing the number of meets and passes reduces the time trains spend sitting in sidings. This speeds train service and improves air quality and fuel conservation. In addition, the capacity and flexibility for train routing will help to minimize the effect of the proposed Amtrak Lynchburg to Roanoke service that NS, DRPT and Amtrak are currently negotiating.

D. Montgomery Tunnel

By removing the clearance obstructions for the second main for the tunnel, this project provides flexibility for train routing. Increased routing options reduces the potential for trains to sit on sidings waiting to queue through the cleared tunnel. This speeds train service and improves air quality and fuel conservation.

E. SCVIT

The SCVIT will significantly enhance the Petersburg/Richmond/Emporia region's competitiveness in the global marketplace. The vast majority of manufactured exports and imports move intermodally in containers. The preferred method to move containers within the US is via rail for the long haul and via truck for the local pick up and delivery. Intermodal transportation is more cost-competitive and more environmentally-beneficial than pure over-the-road truck options. The lack of an intermodal facility in the SCVIT service area means that all containerized freight to and from the region has to move via truck, placing the region at a disadvantage compared to other regions that have intermodal rail service. Having an intermodal facility close by results in demonstrated economic benefits for the region. For example, the Virginia Inland Port (VIP) intermodal facility located near Front Royal (see Exhibit IV Attachment C) has helped sustain 7,600 jobs at companies that have invested in that region due to the existence and availability of intermodal rail service. Twenty-four companies have located near VIP, with an associated \$599 million in investment and over six million square feet of buildings. VIP handled approximately 28,000 containers in 2004. With the ability to more directly serve West Coast Ports via Chicago, the SCVIT is projected to match this volume within several years. The proposed Heartland Corridor double stack clearance improvements will also further benefit the SCVIT.

In addition to the movement of international freight, the SCVIT will improve transportation economics in its service area through more competitive movement of domestic freight, especially to and from Chicago and points west. Trucking and logistics firms are increasingly turning to rail intermodal for the long haul movement of their containers and trailers. In an age of rising fuel prices, significant savings can be obtained moving commodities intermodally via rail at 400 ton-miles per gallon versus via truck at 100 ton-miles per gallon.

The development of the SCVIT will also reduce truck traffic now moving over roads between its service area and Hampton Roads intermodal terminals. There are approximately 15,000 containers and trailers per year now drayed between the Petersburg/Richmond/Emporia area and NS's Chesapeake intermodal facility. This diversion will improve mobility and reduce congestion on Route 460 and I-64.

Another public benefit of the SCVIT will be to allow NS to more fully utilize the limited capacity at its Chesapeake intermodal facility to handle Hampton Roads traffic, both international and domestic. The SCVIT essentially boosts the rail-dependent capacity used by Virginia Port Authority, giving VPA greater flexibility to grow their container business.

- A) Attachment A – Project Data Information Form – Must be completed by Applicant and submitted with this application.

H. Type of Project:

A. Kilby Crossovers, B. Pamplin Siding, C. Altavista Tunnels,
D. Montgomery Tunnel, E. SCVIT

- 1) A, B, E New Construction C, D Rehabilitation ___ Study
- 2) A, B, C, D Rail Infrastructure E Rail Facility/Station
___ Equipment/Rolling Stock ___ Signals/Communication Equipment
- 3) Other _____

I. Application Scope of Work Covers:

<input checked="" type="checkbox"/> Entire Project	<input type="checkbox"/> A Phase of a Multi-Phase Project	<input type="checkbox"/> Completion Phase
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J. Project Budget Summary:

Route 460/Heartland Corridor Projects:	Kilby Crossovers	Pamplin Siding	Altavista Tunnels	Montgomery Tunnel	SCVIT
Preliminary Services, Engineering, or Feasibility Study	0	100,000	0	500,000	0
Environmental Evaluation	0	0	0	0	1,000,000
Design Engineering	0	1,000,000	1,702,000	1,000,000	600,000
Right of Way Acquisition	0	0	0	0	1,000,000
Construction	3,400,000	4,000,000	16,710,000	7,000,000	13,500,000
Construction Management	100,000	100,000	2,402,000	500,000	500,000
Lease/Acquisition of Equipment	0	0	0		1,400,000
Public Involvement (if applicable)	0	0	0		0
Other: (Contingency)	0	800,000	2,081,000	600,000	0
Subtotal	\$3,500,000	\$6,000,000	\$22,895,000	\$9,600,000	\$18,000,000
Project Total	\$59,995,000				

K. Attach detailed budget and schedule information. If the project is for final design, construction or procurement; then plans, specifications and reports to a preliminary engineering level (approximately 30%) should be provided to support the project cost and major features (if applicable). A sample budget and schedule is included in Appendix D.

L. Rail Enhancement Funds Requested in this Application: \$41,996,500

Maximum 70% of Total Project Budget. 70%

Do not include any previous allocations or future phases.

M. Local Match Required by Applicant: \$17,998,500

At least a minimum 30% of Total Project Budget. 30%

If Overmatch, Provide Percentage _____

1) Match breakdown by Source (Including any in-kind match)

a. Provider of Local Match Norfolk Southern

b. Status (confirmed/anticipated) confirmed

c. Attach justification for value of in-kind match.

2) Other Funding Sources Beyond Match Requirement

a. Provider of Overmatch _____

b. Status (confirmed/anticipated) _____

Funding Allocation by Project	Kilby Crossovers	Pamplin Siding	Altavista Tunnels	Montgomery Tunnel	SCVIT
Rail Enhancement Funding	\$2,450,000	\$4,200,000	\$16,000,000	\$6,720,000	\$12,600,000
Rail Enhancement Funding %	70%	70%	70%	70%	70%
NS match	\$1,050,000	\$1,800,000	\$6,895,000	\$2,880,000	\$5,400,000
NS Match %	30%	30%	30%	30%	30%
NS Overmatch %	0%	0%	0%	0%	0%
Total	\$3,500,000	\$6,000,000	\$22,895,000	\$9,600,000	\$18,000,000

N. Project implementation schedule (based in months). List major milestones of the project, including environmental review and public involvement points if applicable.

A. Kilby Crossovers:

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
○ Notice to Proceed	Start Point
○ NS Contracts Engineering Services	1 Month
○ NS Facility Review	3 Months
○ Permitting	3 Months
○ Advertise Work	4 Months
○ Bid Work	6 Months
○ Issue Contract	8 Months
○ Construction or Project Completed	14 Months

B. Pamplin Siding:

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
○ Notice to Proceed	Start Point
○ Survey & finalize plans	3 Months
○ Permitting	5 Months
○ Property Acquisition (if required)	6 Months
○ Bid Work	8 Months
○ Issue Contract	10 Months
○ Grading	11 Months
○ Track work:	15 Months
○ Construction or Project Complete	18 Months

C. Altavista Line Tunnels:

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
○ Notice to Proceed	Start Point
○ NS Contracts Engineering Services	1 Month
○ Environmental Review	3 Months
○ Permitting & VADOT Approval	12 Months
○ Property Acquisition (if required)	12 Months
○ Advertise Work	13 Months
○ Bid Work	14 Months
○ Issue Contract	16 Months
○ Construction or Project Completed	36 Months

D. Montgomery Tunnel:

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
○ Notice to Proceed	Start Point
○ Survey and Develop Plans	3 Months
○ Environmental Review	6 Months
○ Permitting	6 Months
○ Advertise Work	7 Months
○ Bid Work	8 Months
○ Issue Contract	10 Months
○ Construction or Project Completed	24 Months

E. SCVIT:

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
○ Notice to Proceed	Start Point
○ NS Contracts Engineering Services	1 Month
○ Environmental Review	3 Months
○ NS Facility Review	6 Months
○ Permitting & VADOT Approval	12 Months
○ Property acquisition	12 Months
○ Advertise Work	11 Months
○ Bid Work	13 Months
○ Issue Contract	14 Months
○ Construction or Project Completed	24 Months

O. Statement of how this project promotes or does not preclude dual/multi-access use.

A. Kilby Crossovers

This project is on Norfolk Southern owned right-of-way; the rail line will remain an exclusive Norfolk Southern route.

B. Pamplin Siding

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route.

C. Altavista Line Tunnels

This project is on Norfolk Southern owned right-of-way on which only Norfolk Southern operates; the rail line will remain an exclusive Norfolk Southern route. Project will assist to free capacity on parallel northern route; future passenger service between Lynchburg and Roanoke, currently under negotiations, would use the northern route.

D. Montgomery Tunnel

This project is on Norfolk Southern owned right-of-way; the rail line will remain an exclusive Norfolk Southern route.

E. SCVIT.

The Project will promote and enhance competition among freight transportation by providing additional facilities closer to the ultimate markets where traffic can be transferred between the rail and highway modes. The site itself will be rail-accessible by Norfolk Southern and will be neutral and available to all shippers and trucking firms.

P. List additional users of rail line, facility, and/or equipment:

A. Kilby Crossovers

Commonwealth Railway and CSX will not use the rail line improvements but will indirectly benefit as congestion on the NS line in Suffolk could back up trains in the Commonwealth marshalling yard thus impeding Commonwealth Railway's service and potentially the timing for CSX interchange with Commonwealth Railway.

B. Pamplin Siding

Customers using the proposed Roanoke Regional Intermodal Facility and South Central Virginia Intermodal Facility will benefit because the siding will facilitate Heartland Corridor intermodal train service and on-time performance. NS will be the sole rail service provider.

C. Altavista Line Tunnels

The Altavista line tunnel clearances will add capacity and flexibility that could help to provide the capacity required for the proposed Amtrak service between Lynchburg and Roanoke, if NS, Amtrak and DRPT successfully negotiate new service parameters. NS will be the sole freight rail service provider.

D. Montgomery Tunnel

Customers using the proposed Roanoke Regional Intermodal Facility and South Central Virginia Intermodal Facility will benefit because the tunnel clearance will add capacity and flexibility for routing trains, especially double stack intermodal trains. NS will be the sole rail service provider.

E. SCVIT.

The SCVIT facility will be open to multiple steamship lines, trucking companies, and drayage providers. NS will be the sole rail service provider.

Q. Identify any possible environmental or other issues/concerns within the scope of this project.

A. Kilby Crossovers

No environmental issues are expected for the Kilby crossovers project as all work is expected to be performed on the NS right-of-way. It is expected to have a positive environmental impact by reducing the risk of trains waiting to clear the Suffolk

bottleneck and the emissions associated with idling locomotive engines. In addition to reducing the potential for grade crossing collisions by reducing the probability of blocked road crossings in Suffolk, environmental benefits will occur from reduced emissions of automobiles stopped at the 7 crossings in Suffolk.

B. Pamplin Siding

No environmental issues are expected for the Pamplin Siding as all work is expected to be performed on the NS right-of-way. It is expected to have a positive environmental impact by reducing the time that trains idle, and thereby reducing emissions, while waiting to accomplish a meet and pass when the sidings are farther spread out.

C. Altavista Tunnels

An environmental review will have to be performed to identify any impacts from construction; none are known of at this time. It is expected have a positive effect as it will enable Roanoke-Linwood double stack intermodal trains to be rerouted on the southern route which would save approximately 27 miles per trip. The shorter trip will produce a fuel savings and reduction in emissions.

D. Montgomery Tunnel

None are known of at this time. It is expected have a positive effect as it will enable routing options for double stack intermodal trains through Montgomery Tunnel which would reduce the need for trains to wait for other trains to clear the tunnel. This will produce fuel savings and reduction in emissions.

E. SCVIT.

The SCVIT Project is expected to have a positive environmental impact through net reduction of truck-miles, particularly with respect to Route 460 and I-64. Construction of the facility may generate some minor wetland impacts that will be addressed with the appropriate governmental entities before construction begins. Funding has been included in the budget to pay for a 3rd party environmental review prior to construction.

Required Attachments:

Application is not complete without items 1-5 completed by the Applicant and submitted with the Application.


1. Attachment A – Project Data Information Form (provided)
2. Attachment B – Application Checklist (Provided)
3. Detailed cost, budget and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D).
4. Certification of Match/% of Match/Documentation of Source of Match including Defined Match Source (To be provided by Applicant).
5. Certification of Additive Investment (To be provided by Applicant).
6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.
7. Statement by the owner of the facility that acknowledges the Commonwealth will have a public interest in the facilities, materials, equipment and improvements funded or impacted by this project (To be provided by Applicant/Owner).

Application and Attachment Certification

To the best of my knowledge all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:

NORFOLK SOUTHERN RAILWAY COMPANY


Name: Daniel M. Mazur
Title: Vice President

Date: 1/31/2008

One signed original, twelve copies, and an electronic copy in pdf format of the completed application and required documentation must be mailed under applicant cover to:

Director
Virginia Department of Rail and Public Transportation
1313 East Main Street, Suite 300
Richmond, Virginia 23219



Rail Enhancement Fund
Project Application Form

Internal Use

DRPT Tracking #

EXHIBIT I

Attachment A
Project Data Information Form

Date: 1/31/2008

Name of Applicant and Project:

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

EXHIBIT I**Attachment A****Form A1 – Project Cost and Construction Period****Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,**

First Construction Year: 2009Last Construction Year: 2010

Year	Total Project COST	Total DRPT COST
Year 1	\$1,000,000	\$700,000
Year 2	\$2,500,000	\$1,750,000
Year 3		
Year 4		
Year 5		
Total	\$3,500,000	\$2,450,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT I
Attachment A
Form A2 – Freight Service
Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25

Demand Characteristics	CATEGORY	UNITS	VALUE
	Steady state demand – diversion of freight to rail (from trucks)	Carloads/Year	
	First year of diversion	Carloads/Year	
	Number of years until steady state	Number of Years	

Project impact on Travel Distance	CATEGORY	UNITS	VALUE
	Rail miles in Virginia (Existing routing before project)	Miles	
	Rail miles in Virginia (routing after project completion)	Miles	
	Number of years until steady state	Number of Years	

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train	Railcars/Trains	
	Rail tons per Railcar	Tons/Railcar	
	Trucks per Railcar	Trucks/Railcar	

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Trains	
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT I**Attachment A****Form A3 – Passenger Service – Intercity/Amtrak****Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,**

Demand Characteristics	CATEGORY	UNITS	VALUE
	Annual Amtrak passengers (existing)	Passengers/Year	n/a
	Steady State Demand – Additional Amtrak Passengers	Passengers/Year	n/a
	First Year Number of Additional Passengers	Passengers/Year	n/a
	Number of Years Until Steady State	Number of Years	n/a

Project Impact on Travel Distance & Time	CATEGORY	UNITS	VALUE
	Amtrak Passenger Trip Length (existing)	Miles	n/a
	Amtrak Passenger Trip Length (After Project Completion)	Miles	n/a
	Amtrak Travel Time Per Trip (existing)	Minutes	n/a
	Amtrak Travel Time Per Trip (After Project Completion)	Minutes	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT I

Attachment A

Form A5– Demand Characteristics for 15-Year Performance Period
Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

Performance Year	Performance Value *
1	1,000 lifts
2	2,000 lifts
3	3,000 lifts
4	4,000 lifts
5	5,000 lifts
6	6,000 lifts
7	7,000 lifts
8	8,000 lifts
9	9,000 lifts
10	10,000 lifts
11	11,000 lifts
12	12,000 lifts
13	13,000 lifts
14	14,000 lifts
15	15,000 lifts
Total	15,000 lifts by year 15

For Freight Service Projects – car loads or containers per year
For Inter-City/Amtrak Passenger Projects – passengers per year
For Commuter/VRE Passenger Projects – passengers per year

Public Benefit:

Reduced wait at 7 grade crossings in downtown Suffolk within 2 mile stretch with average 26 trains per day on line.

15,000 additional Intermodal lifts at Hampton Roads facilities by year 15, above a 2007 baseline of 328,608 Intermodal Units moving to and from the Hampton Roads region.



Rail Enhancement Fund
Project Application Checklist

Internal Use

DRPT Tracking #

EXHIBIT I

Attachment B

Date: 1/31/2008

Name of Applicant and Project:

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

Checklist for Application:

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ YES ☐ NO

2. Project is an Additive Investment to Virginia.

☒ YES ☐ NO

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ YES ☐ NO

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ YES ☐ NO

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ YES ☐ NO

6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ YES ☐ NO

Rail Enhancement Fund
Project Application Form

EXHIBIT I

Attachment C
Project Background Information

Date: 1/31/2008

Name of Applicant and Project:

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

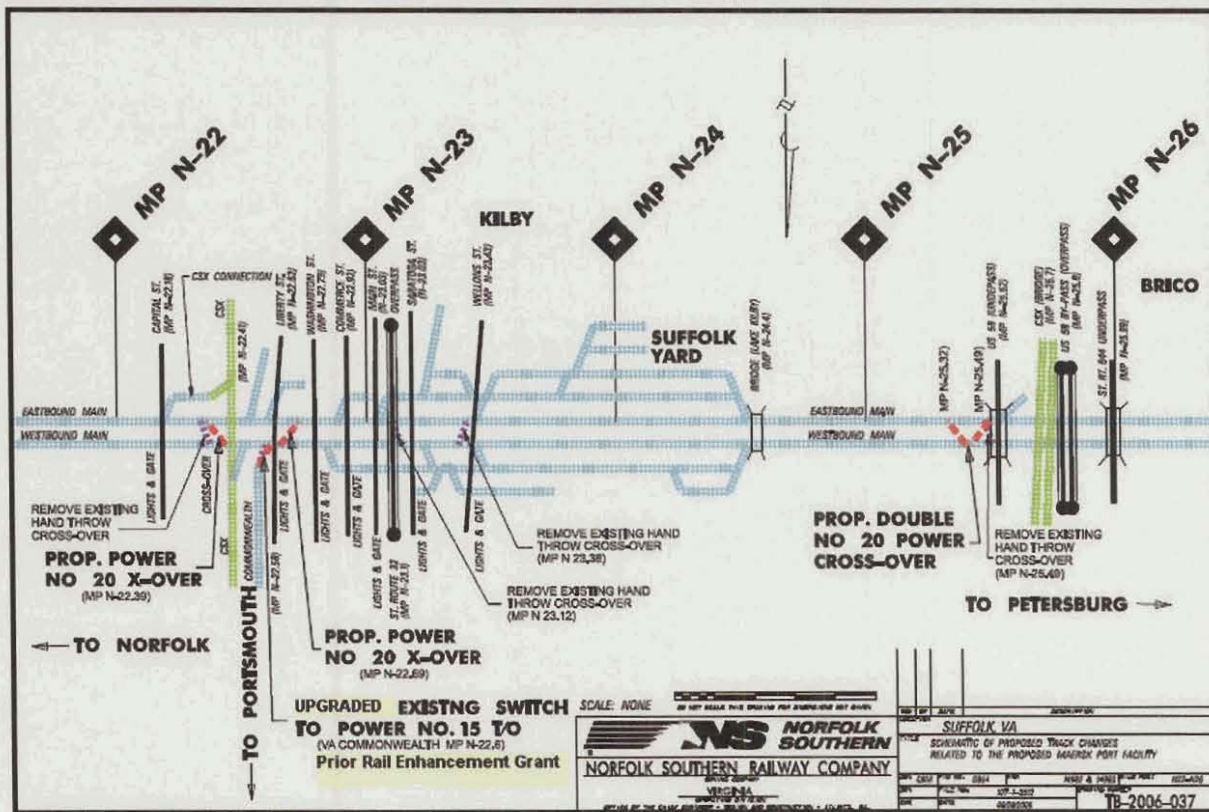


EXHIBIT I
Attachment C

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

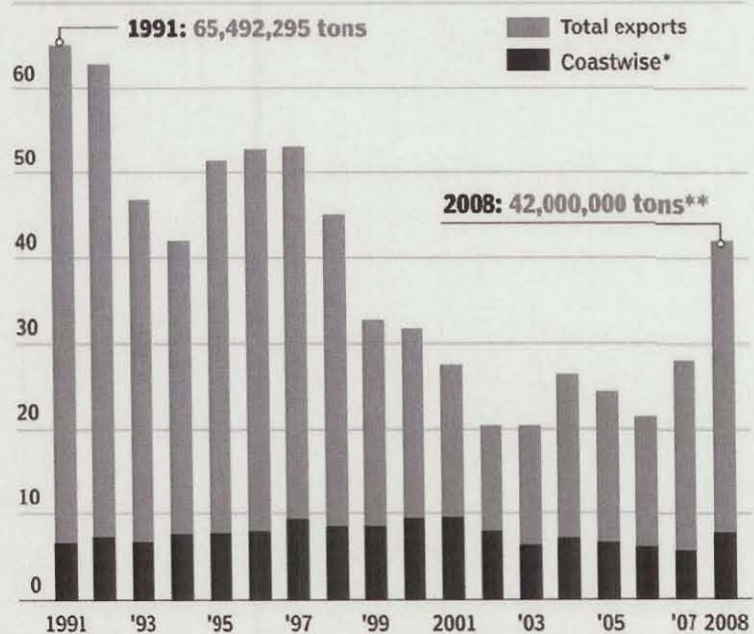
Coal shipments through Hampton Roads are projected to increase 48% in 2008, from 28.3 million tons per year to 42 million tons. Hampton Roads is the nation's top coal port. In 1991 65.5 million tons of coal was shipped through the port. Annual volumes have been running in the low-to-mid 20-million tons between 2002 and 2006. However several factors in the world wide coal market have changed the current outlook. Coal exports to Europe markets have returned as traditional sources have faced problems: "Columbia is about sold out and Venezuela is politically unstable." China continues to consume large quantities of coal. High ocean shipping rates help to make US coal more attractive. (Source: January 27, 2008 The Virginian-Pilot)

COAL SHIPMENTS DECLINE

The volume of coal exported from Hampton Roads has declined since 1991's all-time high, but a surge of shipments is projected for 2008.

Hampton Roads coal exports

70 million tons



SOURCE: T. Parker Host Inc.

THE VIRGINIAN-PILOT

EXHIBIT I Attachment C

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

Source: Suffolk Rail Impact Study, Hampton Roads Planning District

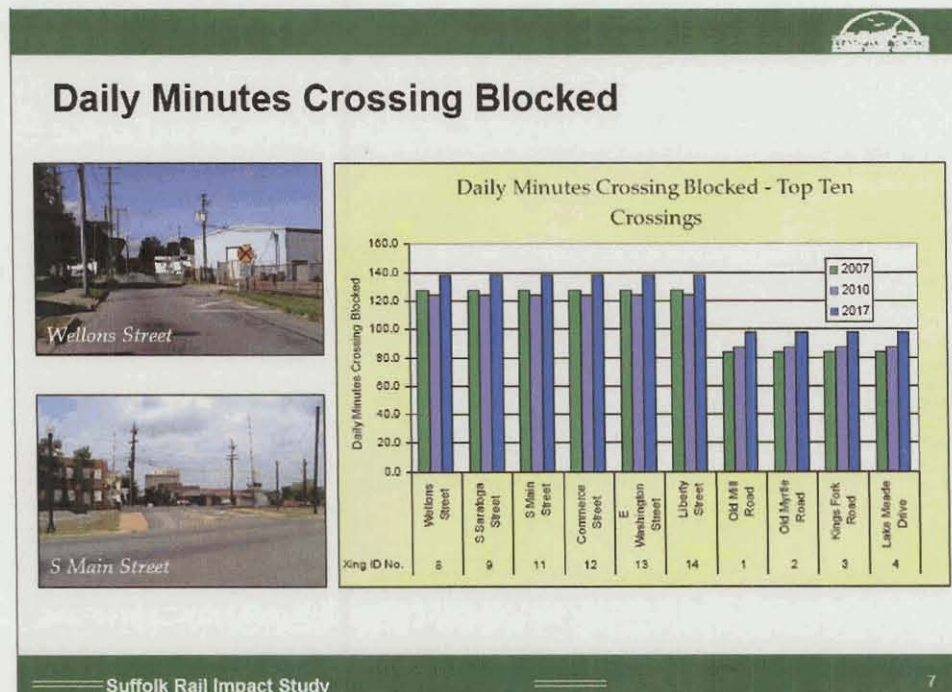
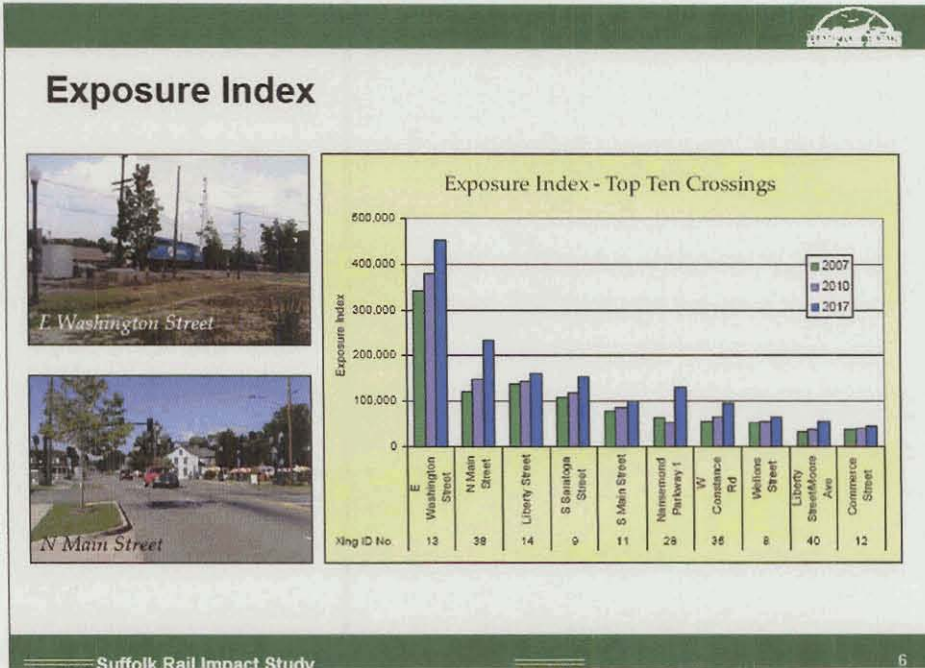
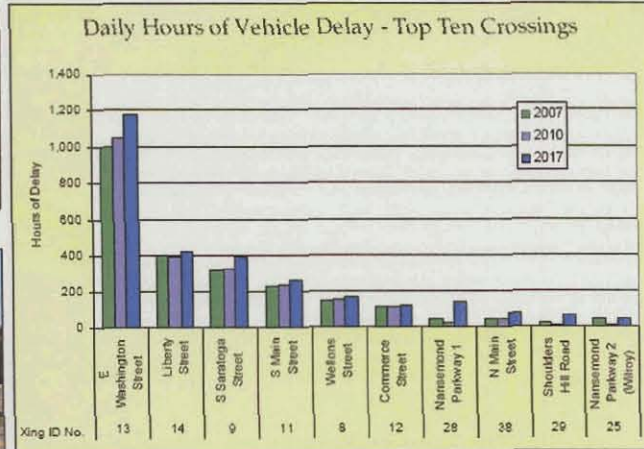


EXHIBIT I Attachment C

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,
Source: Suffolk Rail Impact Study, Hampton Roads Planning District

Daily Hours of Vehicle Delay

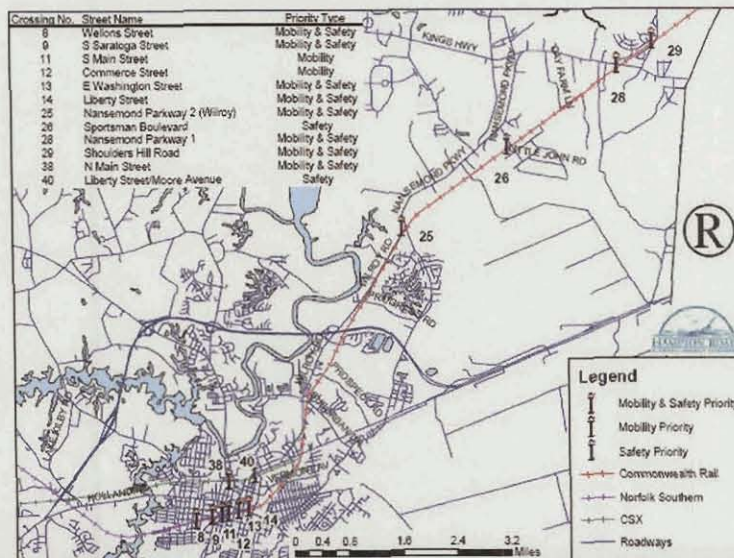


Suffolk Rail Impact Study

8

Improvement Priority Locations

All priority crossings are located in downtown and eastern Suffolk



Suffolk Rail Impact Study

13

Rail Enhancement Fund
Project Application Form

EXHIBIT I

Attachment D
Statement of Public Interest

Name of Applicant and Project:

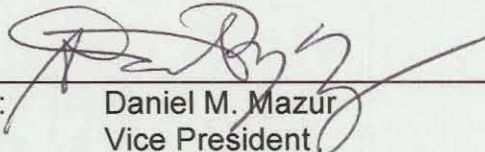
Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

Statement from the owner of the facility that acknowledges the Commonwealth will have a Public Interest in Private Facilities impacted by this project

To Whom It May Concern:

At the appropriate time, NS will enter into an appropriate agreement to be negotiated with the Commonwealth of Virginia to protect the Commonwealth's public interest in the Kilby Crossover Project.

NORFOLK SOUTHERN RAILWAY COMPANY
By:


Name: Daniel M. Mazur
Title: Vice President
Date: 1-31-2008

Rail Enhancement Fund
Project Application Form

EXHIBIT I

Attachment E
Certification Of Match

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

Norfolk Southern Railway Company ("Norfolk Southern") has applied to the Commonwealth of Virginia for Rail Enhancement Funds in the amount of \$2,450,000 in connection with the Norfolk Southern Kilby Crossovers Project. As described in greater detail in Norfolk Southern's application, this project will include the installation of power crossovers in Suffolk, Virginia.

As part of this application, Norfolk Southern hereby certifies that it will provide a local match equivalent to 30 percent of the estimated total project cost for which Rail Enhancement Funds are made available, or \$1,050,000. This match will be provided entirely by Norfolk Southern or one or more parents, subsidiaries or affiliates of Norfolk Southern.

NORFOLK SOUTHERN RAILWAY COMPANY

By:



Name: Daniel M. Mazur
Title: Vice President
Date: 1-31-2008

Rail Enhancement Fund
Project Application Form

EXHIBIT I

Attachment F
Certification Of Additive Investment

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

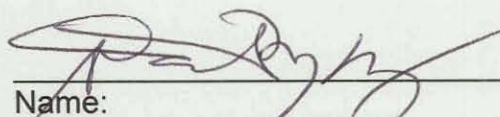
This letter certifies that the Virginia Rail Enhancement Funds requested in the accompanying application will add to the state's rail infrastructure and will not be used to replace funds that would have otherwise been spent in the Commonwealth.

As described in greater detail in Norfolk Southern's application, this project will include the installation of power crossovers in Suffolk, Virginia. Although Norfolk Southern foresees traffic growth in this corridor, internal funds will not be available to undertake these improvements at Suffolk for some years to come. Without Rail Enhancement Funds, this project will not be built until a significant bottleneck occurs effectively blocking downtown Suffolk streets and impacting traffic flows and service to APM, NIT, Lamberts Point, local Suffolk customers and customers on the FD line. This project will enhance traffic flows and improve efficiencies at Suffolk and thereby provide faster and more reliable train services for all Hampton Roads customers. In addition Suffolk residents will not be subjected to prolonged waits at crossings blocked by trains trying to get through the bottleneck.

In sum, Norfolk Southern certifies that the Rail Enhancement Funds requested in its application will be used as part of a public-private partnership for improvements that NS would not undertake alone at this time.

NORFOLK SOUTHERN RAILWAY COMPANY

By:



Name:

Title Name: Daniel M. Mazur

Title: Vice President

Date: 1-31-2008

Rail Enhancement Fund
Project Application Form

EXHIBIT I

Attachment G
Statement Of SWAM Participation

Norfolk Southern - Kilby Crossovers - Suffolk, VA, mp N-22 – N-25,

January 31, 2008

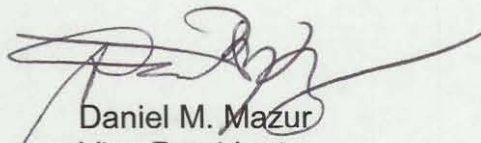
To Whom It May Concern:

In connection with Norfolk Southern Railway Company's Rail Enhancement Fund Application for the Kilby Crossovers project, please accept this letter as the applicant's statement regarding small, women- and minority-owned business (SWAM) participation goals.

For project work that is not performed by Norfolk Southern's workforce, Norfolk Southern will undertake reasonable and good faith efforts to achieve the SWAM participation goal for the project through race-neutral and gender-neutral means that are lawful and non-discriminatory. We understand the project participation goal to be forty percent (40%) of the total value of contracts between Norfolk Southern and third parties for the performance of the project work. The success of Norfolk Southern's efforts will of course be impacted by the availability of qualified and willing small businesses and women- and minority-owned businesses within the market area of the project.

Thank you for considering Norfolk Southern's application.

Very truly yours,



Daniel M. Mazur
Vice President



Rail Enhancement Fund
Project Application Form

Internal Use
DRPT Tracking #

EXHIBIT II

Attachment A
Project Data Information Form

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Pamplin Siding

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

EXHIBIT II
Attachment A
Form A1 – Project Cost and Construction Period
Norfolk Southern – Pamplin Siding

First Construction Year: 2010

Last Construction Year: 2011

Year	Total Project COST	Total DRPT COST
Year 1	\$2,000,000	\$1,400,000
Year 2	\$4,000,000	\$2,800,000
Year 3		
Year 4		
Year 5		
Total	\$6,000,000	\$4,200,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT II
Attachment A
Form A2 – Freight Service
Norfolk Southern – Pamplin Siding

Demand Characteristics	CATEGORY	UNITS	VALUE
	Steady state demand – diversion of freight to rail (from trucks)	Carloads/Year	n/a
	First year of diversion	Carloads/Year	n/a
	Number of years until steady state	Number of Years	n/a

Project impact on Travel Distance	CATEGORY	UNITS	VALUE
	Rail miles in Virginia (Existing routing before project)	Miles	n/a
	Rail miles in Virginia (routing after project completion)	Miles	n/a
	Number of years until steady state	Number of Years	n/a

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train	Railcars/Trains	n/a
	Rail tons per Railcar	Tons/Railcar	n/a
	Trucks per Railcar	Trucks/Railcar	n/a

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Trains	30 minutes 23 trains per day
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT II
Attachment A
Form A3 – Passenger Service – Intercity/Amtrak
Norfolk Southern – Pamplin Siding

Demand Characteristics	CATEGORY	UNITS	VALUE
	Annual Amtrak passengers (existing)	Passengers/Year	n/a
	Steady State Demand – Additional Amtrak Passengers	Passengers/Year	n/a
	First Year Number of Additional Passengers	Passengers/Year	n/a
	Number of Years Until Steady State	Number of Years	n/a

Project Impact on Travel Distance & Time	CATEGORY	UNITS	VALUE
	Amtrak Passenger Trip Length (existing)	Miles	n/a
	Amtrak Passenger Trip Length (After Project Completion)	Miles	n/a
	Amtrak Travel Time Per Trip (existing)	Minutes	n/a
	Amtrak Travel Time Per Trip (After Project Completion)	Minutes	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT II
Attachment A
Form A5– Demand Characteristics for 15-Year Performance Period
Norfolk Southern – Pamplin Siding

Performance Year	Performance Value *
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
Total	

For Freight Service Projects – car loads or containers per year
For Inter-City/Amtrak Passenger Projects – passengers per year
For Commuter/VRE Passenger Projects – passengers per year

Performance Values to be determined as costs and benefits refined and updated as project and funding progresses.

Benefit:
2007 average 23 trains per day
average 30 minutes delay



Rail Enhancement Fund
Project Application Checklist

Internal Use

DRPT Tracking #

EXHIBIT II

Attachment B

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Pamplin Siding

Checklist for Application:

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.
☒ YES ☐ NO
2. Project is an Additive Investment to Virginia.
☒ YES ☐ NO
3. Project provides for, or does not preclude, shared or dual access opportunity.
☒ YES ☐ NO
4. Applicant has provided documentation and certification of at least a minimum 30% match.
☒ YES ☐ NO
5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.
☒ YES ☐ NO
6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.
☒ YES ☐ NO

Rail Enhancement Fund
Project Application Form

EXHIBIT II

Attachment C

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Pamplin Siding





Rail Enhancement Fund
Project Application Form

Internal Use

DRPT Tracking #

EXHIBIT III

Attachment A
Project Data Information Form

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Altavista Line Tunnel Clearances

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

EXHIBIT III
Attachment A
Form A1 – Project Cost and Construction Period
Norfolk Southern – Altavista Line Tunnel Clearances

First Construction Year: 2011

Last Construction Year: 2014

Year	Total Project COST	Total DRPT COST
Year 1	\$7,000,000	\$5,000,000
Year 2	\$7,000,000	\$5,000,000
Year 3	\$8,895,000	\$6,000,000
Year 4		
Year 5		
Total	\$22,895,000	\$16,000,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT III
Attachment A
Form A2 – Freight Service
Norfolk Southern – Altavista Line Tunnel Clearances

Demand Characteristics	CATEGORY	UNITS	VALUE
	Steady state demand – diversion of freight to rail (from trucks)	Carloads/Year	n/a
	First year of diversion	Carloads/Year	n/a
	Number of years until steady state	Number of Years	n/a

Project impact on Travel Distance	CATEGORY	UNITS	VALUE
	Rail miles in Virginia (Existing routing before project)	Miles	81.9
	Rail miles in Virginia (routing after project completion)	Miles	54.8
	Number of years until steady state	Number of Years	3

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train	Railcars/Trains	n/a
	Rail tons per Railcar	Tons/Railcar	n/a
	Trucks per Railcar	Trucks/Railcar	n/a

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Trains	n/a
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT III
Attachment A
Form A3 – Passenger Service – Intercity/Amtrak
Norfolk Southern – Altavista Line Tunnel Clearances

Demand Characteristics	CATEGORY	UNITS	VALUE
	Annual Amtrak passengers (existing)	Passengers/Year	0
	Steady State Demand – Additional Amtrak Passengers	Passengers/Year	TBD pending successful negotiation
	First Year Number of Additional Passengers	Passengers/Year	TBD pending successful negotiation
	Number of Years Until Steady State	Number of Years	TBD pending successful negotiation

Project Impact on Travel Distance & Time	CATEGORY	UNITS	VALUE
	Amtrak Passenger Trip Length (existing)	Miles	0
	Amtrak Passenger Trip Length (After Project Completion)	Miles	TBD
	Amtrak Travel Time Per Trip (existing)	Minutes	0
	Amtrak Travel Time Per Trip (After Project Completion)	Minutes	TBD

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT III
Attachment A
Form A5– Demand Characteristics for 15-Year Performance Period
Norfolk Southern – Altavista Line Tunnel Clearances

Performance Year	Performance Value *
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
Total	

For Freight Service Projects – car loads or containers per year
For Inter-City/Amtrak Passenger Projects – passengers per year
For Commuter/VRE Passenger Projects – passengers per year

Performance Values to be determined as costs and benefits refined and updated as project and funding progresses.

Benefit:

27 mileage savings Roanoke to Greensboro intermodal service.

To be determined pending successful negotiation between NS, Amtrak & DRPT.
Project provides capacity to enable introduction of new service. NS is not liable or responsible for ridership of Amtrak service.



Rail Enhancement Fund
Project Application Checklist

Internal Use

DRPT Tracking #

EXHIBIT III

Attachment B

Date: 1/31/2008

Name of Applicant and Project:

Norfolk Southern – Altavista Line Tunnel Clearances

Checklist for Application:

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ YES ☐ NO

2. Project is an Additive Investment to Virginia.

☒ YES ☐ NO

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ YES ☐ NO

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ YES ☐ NO

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ YES ☐ NO

6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ YES ☐ NO

Rail Enhancement Fund
Project Application Form

EXHIBIT III

Attachment C

Date: 1/31/2008

Name of Applicant and Project:

Norfolk Southern – Altavista Line Tunnel Clearances

<u>Milepost</u>	<u>Obstruction</u>	<u>Improvement</u>
V-236.06	Slide fence	Modify fence
V-235.7	Hardy tunnel	Enlarge tunnel
V-230.4	SR 755 overhead Hwy	Raise bridge
V-226.0	Goodview tunnel	Enlarge tunnel
V-223.50	SR 608 overhead Hwy	Raise bridge
V-220.00	SR654 overhead Hwy	Raise bridge
V-214.8	SR 737 overhead Hwy	Raise bridge
V-213.5	Huddleston tunnel	Enlarge tunnel
V-208.4	Slide fence	Modify fence
V-206.1	Leesville tunnel	Enlarge tunnel
V-202.3	Private overhead highway	Raise bridge
V-206.09	Slide fence	Modify fence
V-194.4	Mansion tunnel	Enlarge tunnel

EXHIBIT III
Attachment C

Hardy Tunnel – milepost V-235.7

Single-width tunnel, length 760 feet

Degree of curvature 4.0 LT

Concrete lined at portals only

Superelevation 2.0"

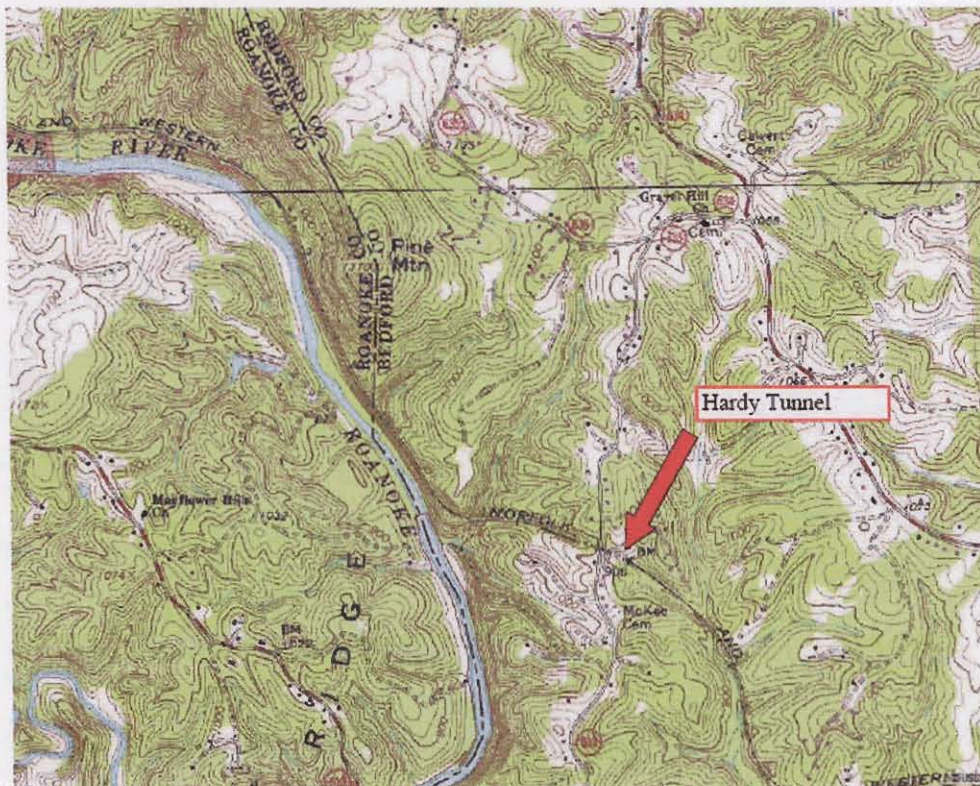


EXHIBIT III
Attachment C

Goodview Tunnel – milepost V-226

Single-width tunnel, length 989 feet
Tangent track

Concrete lined at portals only
Superelevation 0.0"

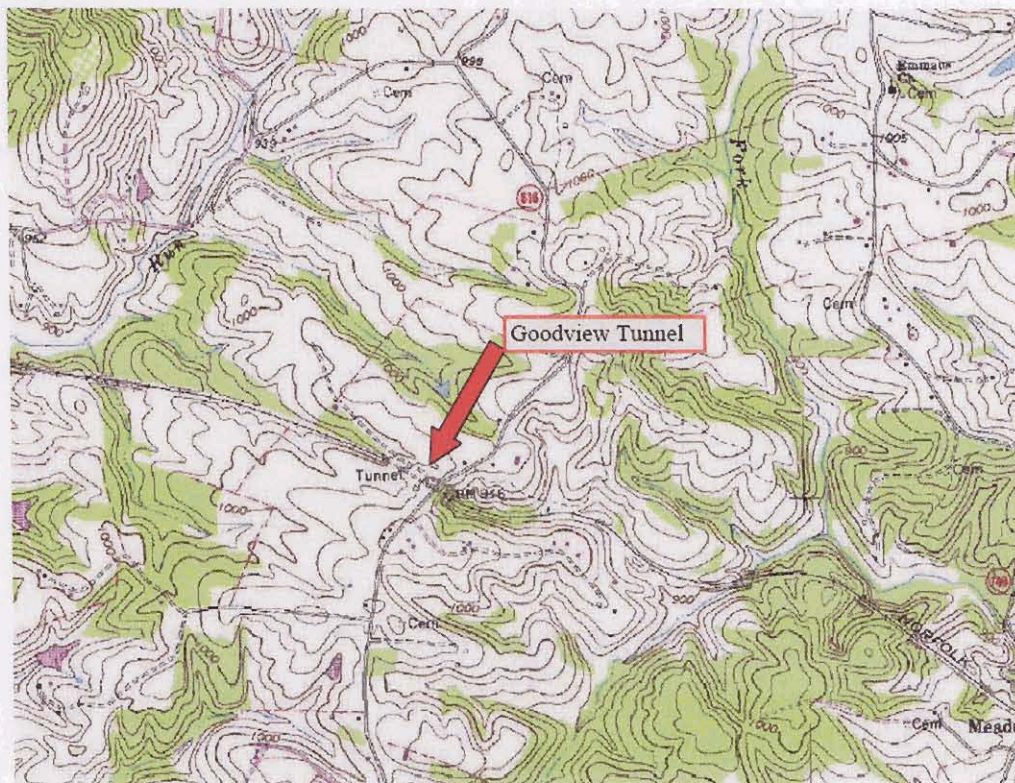


EXHIBIT III
Attachment C

Huddleston Tunnel – milepost V-213.5

Single-width tunnel, length 562 feet

Concrete lined

Degree of Curvature 5.0 RT

Superelevation 3.5"

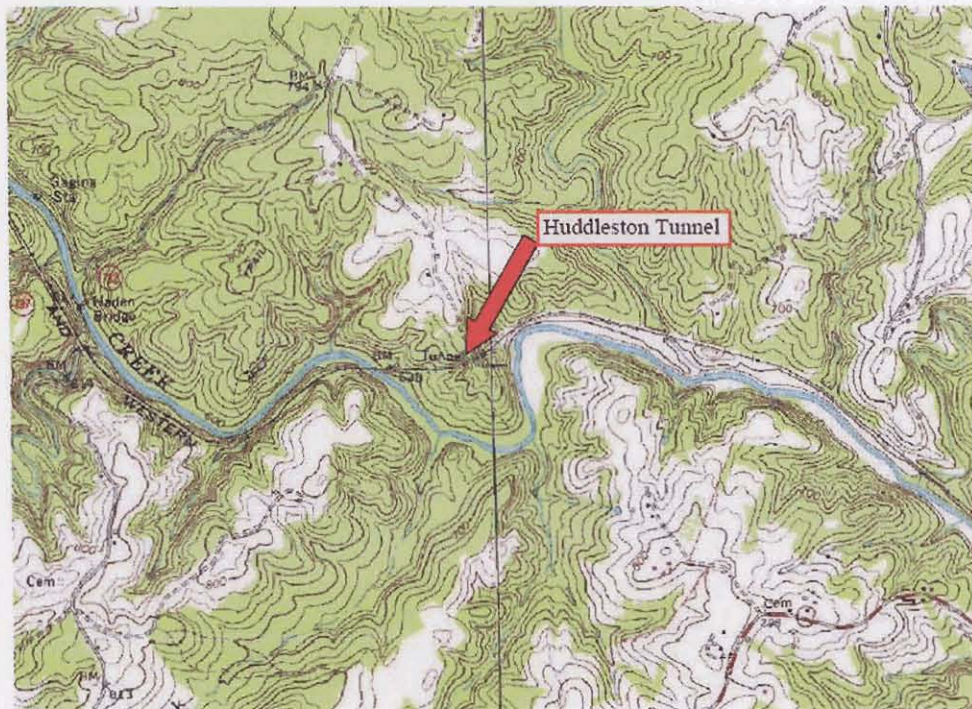


EXHIBIT III
Attachment C

Leesville Tunnel – milepost V-213.5

Single-width tunnel, length 832 feet
Tangent track

Unlined
Superelevation 0.0"

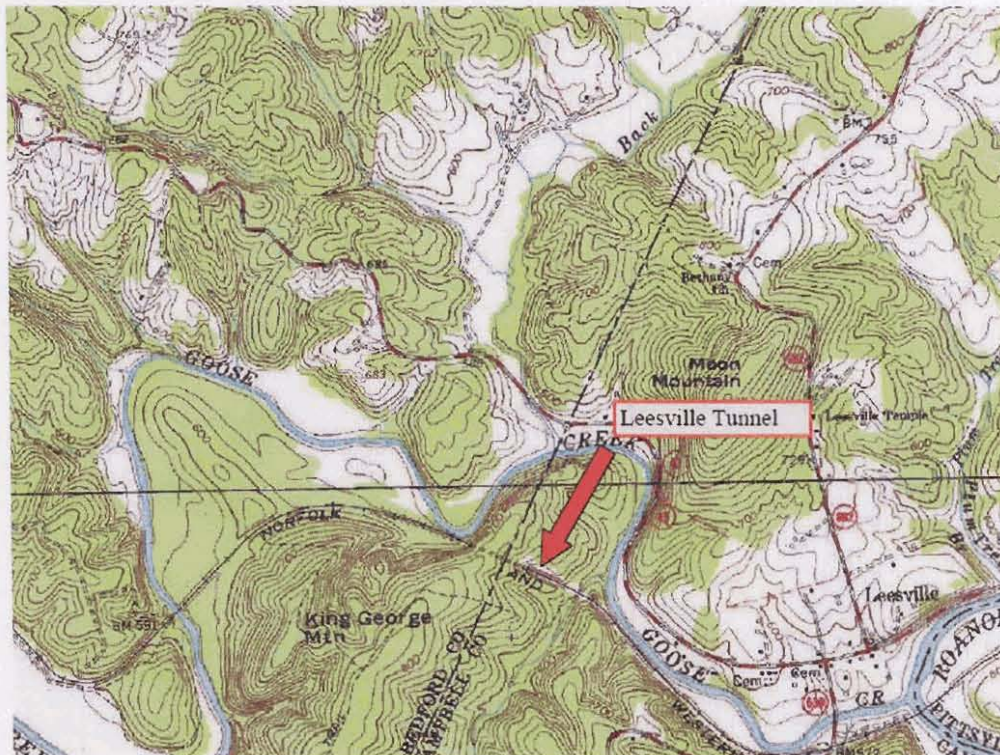
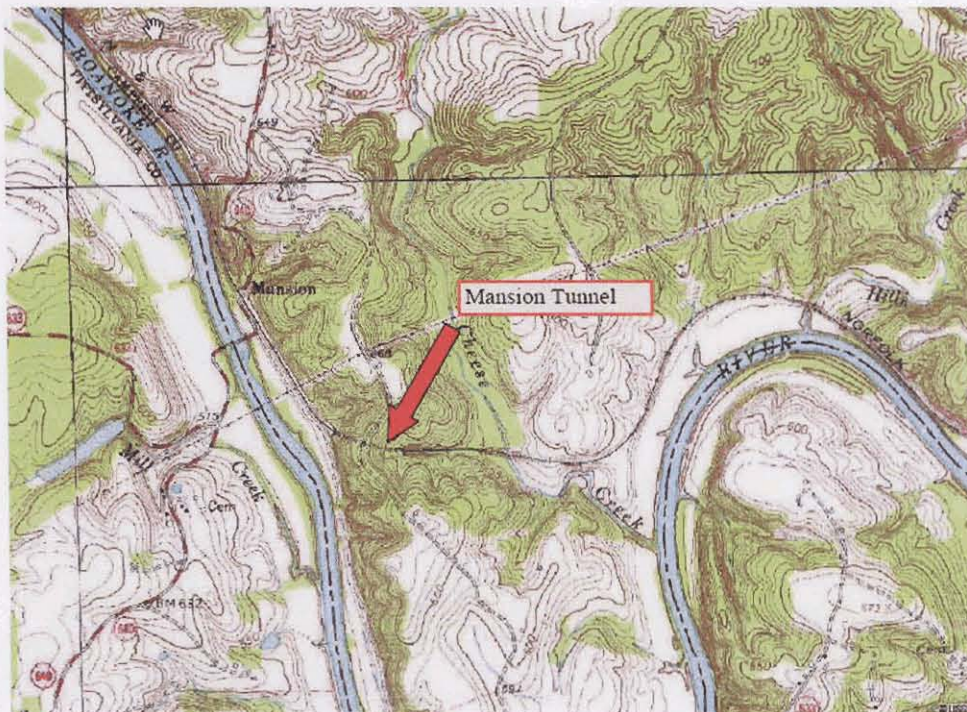


EXHIBIT III
Attachment C

Mansion Tunnel – milepost V-194.4

Single-width tunnel, length 931 feet
Degree of Curvature 3.8 RT

Concrete lined
Superelevation 2.5"





Rail Enhancement Fund
Project Application Form

Internal Use

DRPT Tracking #

EXHIBIT IV

Attachment A
Project Data Information Form

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Montgomery Tunnel Clearance

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

EXHIBIT IV
Attachment A
Form A1 – Project Cost and Construction Period
Norfolk Southern – Montgomery Tunnel Clearance

First Construction Year: 2011

Last Construction Year: 2012

Year	Total Project COST	Total DRPT COST
Year 1	\$3,600,000	\$2,520,000
Year 2	\$6,000,000	\$4,200,000
Year 3		
Year 4		
Year 5		
Total	\$9,600,000	\$6,720,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT IV
Attachment A
Form A2 – Freight Service
Norfolk Southern – Montgomery Tunnel Clearance

Demand Characteristics	CATEGORY	UNITS	VALUE
	Steady state demand – diversion of freight to rail (from trucks)	Carloads/Year	n/a
	First year of diversion	Carloads/Year	n/a
	Number of years until steady state	Number of Years	n/a

Project impact on Travel Distance	CATEGORY	UNITS	VALUE
	Rail miles in Virginia (Existing routing before project)	Miles	
	Rail miles in Virginia (routing after project completion)	Miles	
	Number of years until steady state	Number of Years	

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train	Railcars/Trains	n/a
	Rail tons per Railcar	Tons/Railcar	n/a
	Trucks per Railcar	Trucks/Railcar	n/a

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Trains	n/a
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT IV
Attachment A
Form A3 – Passenger Service – Intercity/Amtrak
Norfolk Southern – Montgomery Tunnel Clearance

Demand Characteristics	CATEGORY	UNITS	VALUE
	Annual Amtrak passengers (existing)	Passengers/Year	n/a
	Steady State Demand – Additional Amtrak Passengers	Passengers/Year	n/a
	First Year Number of Additional Passengers	Passengers/Year	n/a
	Number of Years Until Steady State	Number of Years	n/a

Project Impact on Travel Distance & Time	CATEGORY	UNITS	VALUE
	Amtrak Passenger Trip Length (existing)	Miles	n/a
	Amtrak Passenger Trip Length (After Project Completion)	Miles	n/a
	Amtrak Travel Time Per Trip (existing)	Minutes	n/a
	Amtrak Travel Time Per Trip (After Project Completion)	Minutes	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT IV
Attachment A
Form A5– Demand Characteristics for 15-Year Performance Period
Norfolk Southern Montgomery Tunnel Clearance

Performance Year	Performance Value *
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
Total	

For Freight Service Projects – car loads or containers per year
For Inter-City/Amtrak Passenger Projects – passengers per year
For Commuter/VRE Passenger Projects – passengers per year

Performance Values to be determined as costs and benefits projections refined as project and funding progresses.



Rail Enhancement Fund
Project Application Checklist

Internal Use

DRPT Tracking #

EXHIBIT IV

Attachment B

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Montgomery Tunnel Clearance

Checklist for Application:

7. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ YES ☐ NO

8. Project is an Additive Investment to Virginia.

☒ YES ☐ NO

9. Project provides for, or does not preclude, shared or dual access opportunity.

☒ YES ☐ NO

10. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ YES ☐ NO

11. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ YES ☐ NO

12. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ YES ☐ NO

Rail Enhancement Fund
Project Application Form

EXHIBIT IV

Attachment C

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Montgomery Tunnel



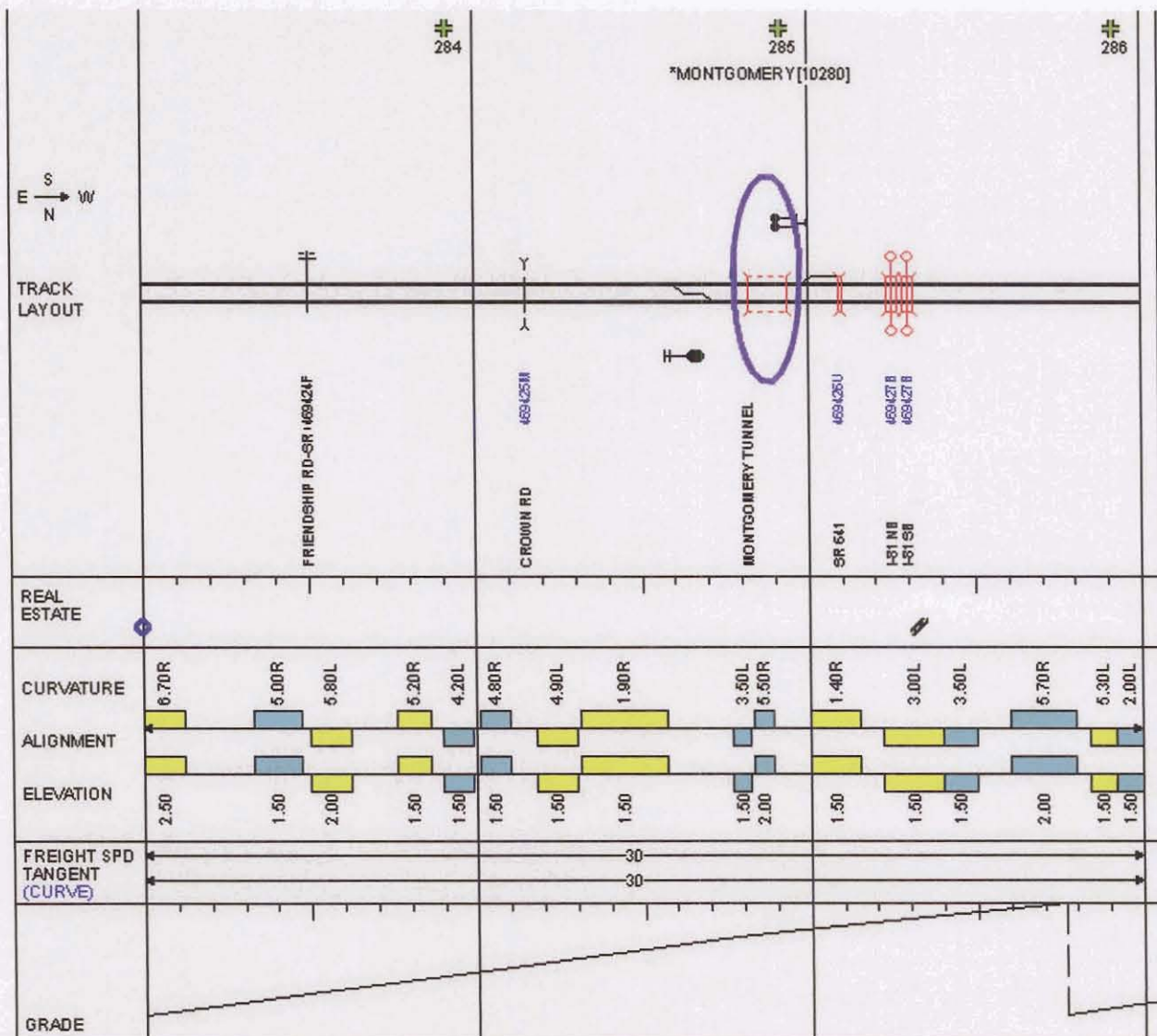
Rail Enhancement Fund
Project Application Form

EXHIBIT IV

Attachment C

Date: 1/31/2008

Name of Applicant and Project:
Norfolk Southern – Montgomery Tunnel





Rail Enhancement Fund
Project Application Form

Internal Use

DRPT Tracking #

EXHIBIT V

Attachment A
Project Data Information Form

Date: 1/31/2008

Name of Applicant and Project:

Norfolk Southern – South Central Virginia Intermodal Terminal

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

EXHIBIT V
Attachment A
Form A1 – Project Cost and Construction Period
Norfolk Southern - SCVIT

First Construction Year: 2014

Last Construction Year: 2016

Year	Total Project COST	Total DRPT COST
Year 1	\$9,000,000	\$5,000,000
Year 2	\$9,000,000	\$5,650,000
Year 3		
Year 4		
Year 5		
Total	\$18,000,000	\$10,650,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT V
Attachment A
Form A2 – Freight Service
Norfolk Southern - SCVIT

Demand Characteristics	CATEGORY	UNITS	VALUE
	Steady state demand – diversion of freight to rail (from trucks)	Intermodal Lifts /Year	30,000 lifts /Year
	First year of diversion	Intermodal Lifts/Year	2,000 lifts /Year
	Number of years until steady state	Number of Years	15 years

Project impact on Travel Distance	CATEGORY	UNITS	VALUE
	Rail miles in Virginia (Existing routing before project)	Miles	n/a
	Rail miles in Virginia (routing after project completion)	Miles	n/a
	Number of years until steady state	Number of Years	n/a

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train	Railcars/Trains	
	Rail tons per Railcar	Tons/Railcar	
	Trucks per Railcar	Trucks/Railcar	

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Trains	n/a
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT V
Attachment A
Form A3 – Passenger Service – Intercity/Amtrak
Norfolk Southern - SCVIT

Demand Characteristics	CATEGORY	UNITS	VALUE
	Annual Amtrak passengers (existing)	Passengers/Year	n/a
	Steady State Demand – Additional Amtrak Passengers	Passengers/Year	n/a
	First Year Number of Additional Passengers	Passengers/Year	n/a
	Number of Years Until Steady State	Number of Years	n/a

Project Impact on Travel Distance & Time	CATEGORY	UNITS	VALUE
	Amtrak Passenger Trip Length (existing)	Miles	n/a
	Amtrak Passenger Trip Length (After Project Completion)	Miles	n/a
	Amtrak Travel Time Per Trip (existing)	Minutes	n/a
	Amtrak Travel Time Per Trip (After Project Completion)	Minutes	n/a

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

EXHIBIT V
Attachment A
Form A5– Demand Characteristics for 15-Year Performance Period
Norfolk Southern - SCVIT

Performance Year	Performance Value *
1	2,000 lifts
2	4,000 lifts
3	6,000 lifts
4	8,000 lifts
5	10,000 lifts
6	12,000 lifts
7	14,000 lifts
8	16,000 lifts
9	18,000 lifts
10	20,000 lifts
11	22,000 lifts
12	24,000 lifts
13	26,000 lifts
14	28,000 lifts
15	30,000 lifts
Total	30,000 lifts by year 15

For Freight Service Projects – car loads or containers per year
For Inter-City/Amtrak Passenger Projects – passengers per year
For Commuter/VRE Passenger Projects – passengers per year

Performance Values to be determined as costs and benefits refined and updated as project and funding progresses.



Rail Enhancement Fund
Project Application Checklist

Internal Use

DRPT Tracking #

EXHIBIT V

Attachment B

Date: 1/31/2008

Name of Applicant and Project:

Norfolk Southern – South Central Virginia Intermodal Terminal

Checklist for Application:

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ YES ☐ NO

2. Project is an Additive Investment to Virginia.

☒ YES ☐ NO

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ YES ☐ NO

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ YES ☐ NO

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ YES ☐ NO

6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

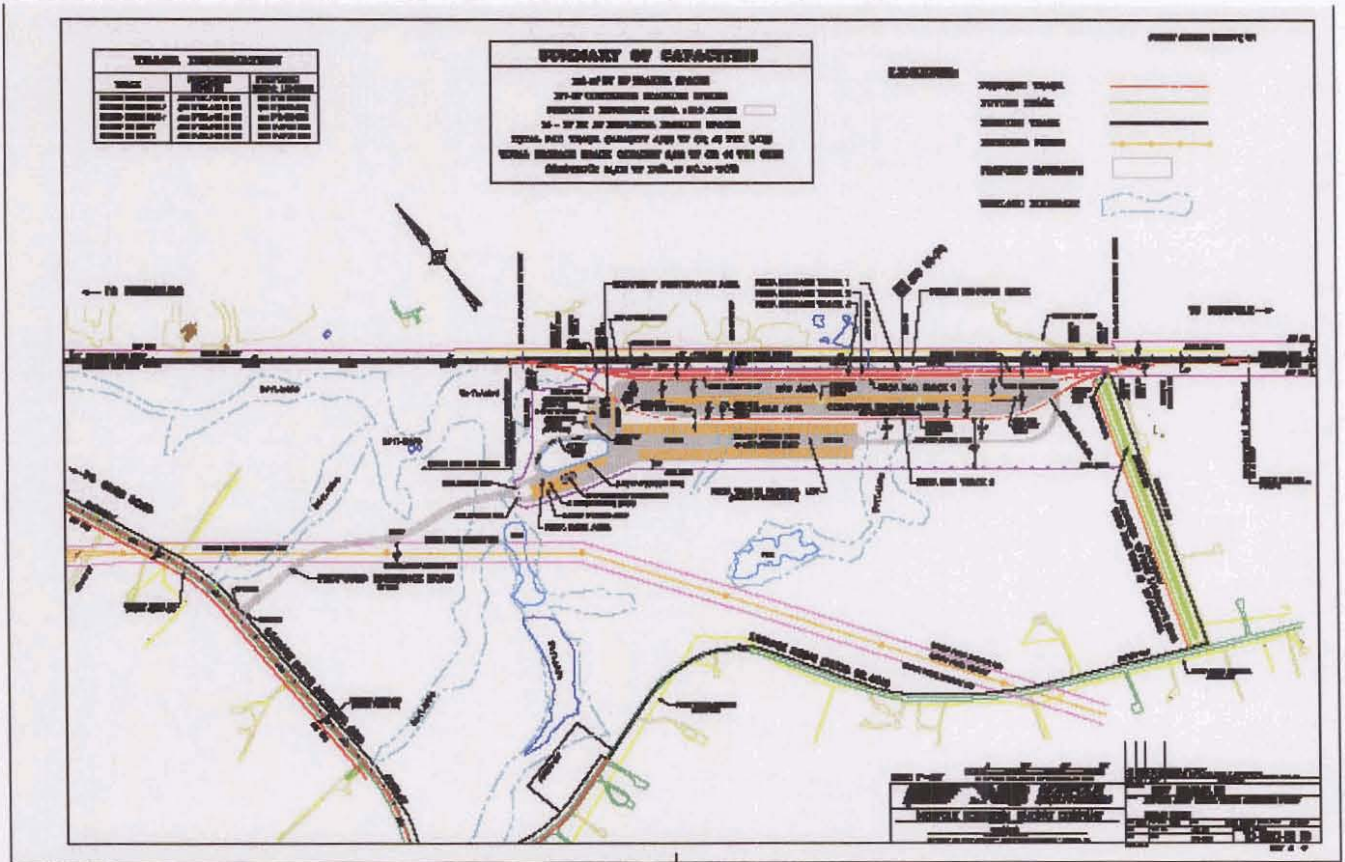
☒ YES ☐ NO

Rail Enhancement Fund
Project Application Form

EXHIBIT V

Attachment C

Layout of Proposed South Central Virginia Intermodal Terminal



Rail Enhancement Fund
Project Application Form

EXHIBIT V

Attachment C

Economic Development Near Virginia Inland Port

Small Rail Development The Virginia Inland Port

- Economic Engine for the Commonwealth of Virginia
- Opened in 1989
- 24 Major Companies have Located Near VIP
 - Investment of Over \$599 Million
 - Over 6 Million SF of Buildings
 - Employment of Over 7,000



Major Companies Located Near VIP

AB&C Group
AmeriCold Logistics
Blue Ridge (HBH) Prestain
Butter-Krust Baking Co.
DuPont
East Coast Brokers Inc.
Family Dollar Inc.
Ferguson Enterprises Inc.
Ford Motor Co.
General Parts Inc.
Home Depot
HP Hood Inc.

Jouan/Precision Scientific
Kohl's Corp.
Pen Tab
Rite Aid Corp.
Rubbermaid
Spahr Metric Inc.
SYSCO Corp.
Toray Plastics
Trex
Walden Foods
Winchester Cold Storage
World Wide Automotive